

SCIENTECH®

SERIES 12000

NEW



ISO 9001
REGISTERED

The **MEASURE**
of Confidence

Made in the U.S.A.

SERIES 12000

This new and improved Series incorporates Sciencetech's unique and unequalled displacement detector, which is the heart of our state of the art, self-adjusting digital servo. The result is a ten-fold increase in weighing performance while maintaining our proven, simple, easy to

CE use, operator interface. The attractive quality of this new design is demonstrated by the CE mark of conformity along with Sciencetech's ISO 9001 registration.



Every Series 12000 model is a precise weighing device incorporating an impressive list of standard features. Although capable of weighing heavy-weight loads, these exemplary performers were designed to indicate feather-weight readabilities such as:

- ▶ SM Semi-Mirco Balances with readabilities of 0.01mg
- ▶ SA Analytical Balances with readabilities of 0.1mg
- ▶ SP Precision Balances with readabilities of 1mg
- ▶ SL Laboratory Balances with readabilities of 0.01g
- ▶ SG General Balances with readabilities of 0.1g

All Series 12000 balances are microprocessor controlled with Sciencetech's exclusive real time temperature compensation algorithm. This revolutionary internal software yields accurate, reproducible results without the need to recalibrate your balance as the ambient temperature varies.

SM Semi-Mirco Balances



Semi-Micro (0.01mg) weighing has never been easier as the SM series comprises an impressive list of both single and dual range units. What is even more remarkable is every dual range model possesses Sciencetech's exclusive Floating Tare™ feature. This powerful feature give you two balances in one unit.

Used hand-to-hand with autoranging, Floating Tare provides low range readability (0.01mg) throughout the entire high range capacity of the balance. Access Floating Tare with the press of a button and you have ten times more resolution anywhere within the high range domain. This powerful feature is rarely found in semi-micro balances. In addition, you can now choose a unit with a motorized automatic internal calibration feature utilizing internal weights or choose a unit which uses an external weight for calibration which is the preferred method of calibration by ISO auditors.

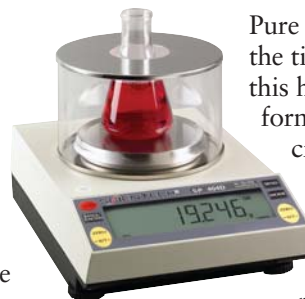
SA Analytical Balances



Analytical weighing demands a high standard of accuracy. The SA Series delivers. Weights from 80 to 510 grams with 0.1mg resolutions are displayed promptly, clearly and reliably. The SA 510 reigns over this analytical series as the first 510 gram balance with a 0.1mg readability. This makes the SA 510 the unrivaled heavyweight of all analyticals. The SA 80 is the workhorse of the SA realm. This handy performer is perfect for the value conscious user who wants ultra-featherweight readability for a lightweight price.

Also now you can select an analytical model with a motorized automatic internal calibration feature utilizing internal weights or choose a unit which uses an external weight for calibration which is the preferred method of calibration by ISO auditors.

SP Precision Balances

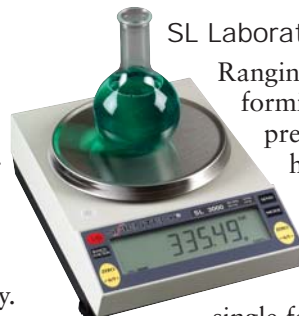


Pure precision is the title which defines this high flying formation. Able to cradle weights ranging from 150 to 1500 grams with a featherweight resolution of 1mg,

this high performance series speedily displays results on an easy to use control panel.

The first and only 1500 gram balance with a 1mg readability, the SP 1500 is the unequalled heavyweight in this division. Although the SP 150 is the lightweight model in this ensemble, it also boasts an inspiring list of standard features including a circular glass windscreen, as do all SP models.

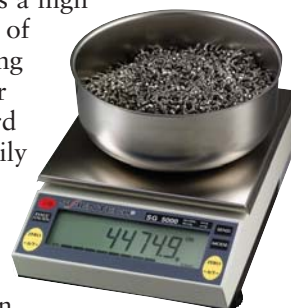
SL Laboratory Balances



Ranging from modest to formidable birds of prey, the SL models have an impressive wing span of 400 to 6000 grams and still perceive the touch of a single feather down to 0.01g. With two different sized weighing platforms, these laboratory balances can also be configured to handle your specific weighing environment.

SG General Balances

The SG Series is a high capacity family of balances sporting flat, rectangular pans as standard equipment. Easily handling up to 12,000 grams with a feather touch of 0.1g, this species is an accurate, feature-rich line perfect for any high capacity application.



SERIES 12000

**SM Semi-Micro
Models**



**SP Precision
Models**



**SL Laboratory
Models**



**SA Analytical
Models**



**SG General
Models**

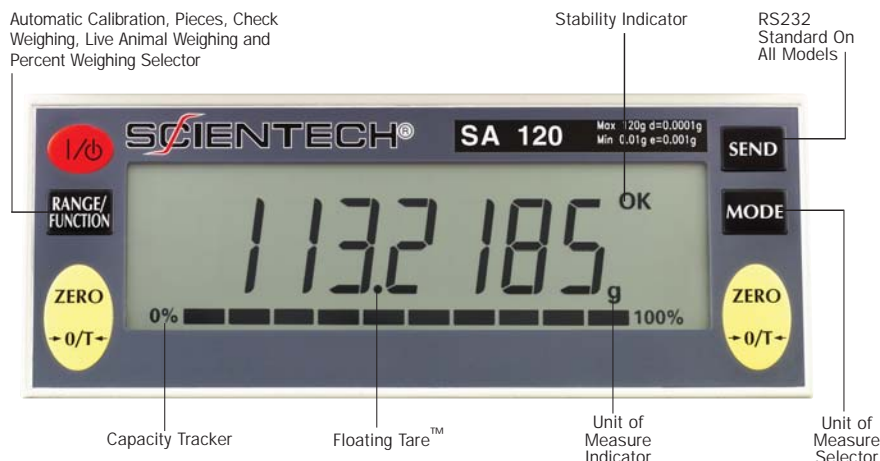


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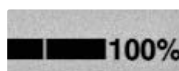
SERIES 12000 STANDARD FEATURES

- ▶ GLP/GMP/ISO compatible
- ▶ Automatic calibration programs
- ▶ RS232 data interface with user selectable baud rates up to 19,200
- ▶ Automatic zero tracking
- ▶ Automatic system check-out sequencing
- ▶ Built-in security bracket
- ▶ Stability indicator
- ▶ Live animal weighing
- ▶ Percent weighing
- ▶ Capacity tracker
- ▶ Below balance weighing
- ▶ Microprocessor control
- ▶ Exclusive real time temperature compensation software
- ▶ Parts counting
- ▶ Check weighing
- ▶ Selectable filtering
- ▶ Multiple units of measure
- ▶ Floating Tare™ (dual range models only)
- ▶ Autoranging (dual range models only)

Special FEATURES

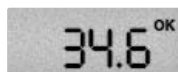


Capacity Tracker



This dynamic graphical display automatically depicts the used and unused portions of your weighing range. The tracker is indispensable in taring out container weight and then weighing several components sequentially. You always know how much capacity remains.

Stability Indicator



The balance tells you when the reading is valid, insuring reliable results. Stability sensitivity is user selectable which allows you to customize your balance setup. You may disable the indicator at any time.

Check Weighing

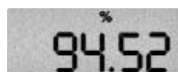


Here is Scientech's answer to a go/no-go weight gauge. The balance tells if your sample weight is too high, too low, or OK. Interpretive error is eliminated. This application is ideal for JIT environments where quality of each sample must be assured.

Floating Tare™ (Dual range models only.)

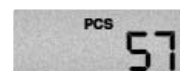
Dual range balances offer you two balances in one. Used hand-in-hand with autoranging, Floating Tare™ provides low range readability throughout the entire high range capacity of the balance. Access Floating Tare™ with the press of a button and you have ten times more resolution anywhere within the high range domain.

Percent Weighing



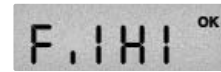
By quickly selecting the % mode, you are able to weigh a sample in percent in order to easily determine percent moisture loss, percent solids, or compounding by percent.

Parts Counting



You can even use a Scientech balance for piece counting. Every model empowers you to count very small to large components quickly and accurately. The minimum fixed sample number is ten with a user selectable larger sample size feature at your fingertips.

Vibration Filters



This feature authorizes you to select a filter setting which is best suited to your task. If your surroundings are vibration-free, set the filtering to low which yields results in the fastest possible time. In more adverse conditions, select either the normal or high filter parameter. These selections will insure reliable readings during your different weighing applications.

Units of Measure

These multifunctional balances present a choice of eight different standard units of measure: grams (g), carats (ct), ounces (oz), troy ounces (ozt), pennyweight (dwt), milligrams (mg), kilograms (kg), and pounds (lb). Just push the mode button to select your desired unit of measure. Also available as an option is a custom weight register which allows any unit of measure you wish.

Live Animal Weighing



Weighing using the time averaging mode is ideal for live animal or severe environment weighing. This feature also includes a reset function which allows you to arrive at the final weight reading in seconds rather than minutes with just the push of a button.

SERIES *Specifications*



MODEL	SM50	SM50IW	SM99	SM99IW	SM124D
WEIGHING MODE	Single	Single	Single	Single	Dual
CAPACITY/RANGE	g 50	50	99	99	40/120
READABILITY	mg 0.01	0.01	0.01	0.01	0.01/0.1
REPEATABILITY (std dev)	mg 0.02	0.02	0.04	0.04	0.02/0.1
LINEARITY	±mg 0.03	0.03	0.03	0.03	0.03/0.2
CALIBRATION	External	Internal	External	Internal	External
STABILIZATION TIME	s ~8	~8	~8	~8	~8
PAN SIZE	in Circular 3.5 diameter				
WINDSCREEN	in 7.5W x 8.25D x 9.5H				
BALANCE HOUSING	in 7.5W x 11.25D x 3.25H				



MODEL	SA 410	SA 410IW	SA 510	SA 510IW	SA 210D
WEIGHING MODE	Single	Single	Single	Single	Dual
CAPACITY/RANGE	g 410	410	510	510	100/200
READABILITY	mg 0.1	0.1	0.1	0.1	0.1/1
REPEATABILITY (std dev)	mg 0.15	0.15	0.2	0.2	0.1/.5
LINEARITY	±mg 0.2	0.2	0.2	0.2	0.2/.5
CALIBRATION	External	Internal	External	Internal	External
STABILIZATION TIME	s ~5	~5	~5	~5	~3
PAN SIZE	in Circular 3.5 diameter				
WINDSCREEN	in 7.5W x 8.25D x 9.5H				
BALANCE HOUSING	in 7.5W x 11.25D x 3.25H				



MODEL	SL 400	SL 600	SL 1000	SL 2000
WEIGHING MODE	Single	Single	Single	Single
CAPACITY/RANGE	g 400	600	1000	2000
READABILITY	g 0.01	0.01	0.01	0.01
REPEATABILITY (std dev)	g 0.01	0.01	0.01	0.01
LINEARITY	±g 0.015	0.015	0.015	0.015
CALIBRATION	External	External	External	External
STABILIZATION TIME	s ~3	~3	~3	~3
PAN SIZE	in Circular 4.5 diameter			
WINDSCREEN	in Optional			
BALANCE HOUSING	in 7.5W x 11.25D x 3.25H			



SM124DIW	SM128D	SM128DIW	SA 80	SA 80IW
Dual	Dual	Dual	Single	Single
40/120	80/120	80/120	80	80
0.01/0.1	0.01/0.1	0.01/0.1	0.1	0.1
0.02/0.1	0.03/0.1	0.03/0.1	0.1	0.1
0.03/0.2	0.03/0.2	0.03/0.2	0.2	0.2
Internal	External	Internal	External	Internal
~8	~8	~8	~3	~3

Circular 3.5 diameter
7.5W x 8.25D x 9.5H
7.5W x 11.25D x 3.25H



SA 210DIW	SA 525D	SA 525DIW	SP 150	SP 250	SP 350
Dual	Dual	Dual	Single	Single	Single
100/200	250/500	250/500	150	250	350
0.1/1	0.1/1	0.1/1	1	1	1
0.1/5	0.2/5	0.2/5	1	1	1
0.2/5	0.2/5	0.2/5	1.5	1.5	1.5
Internal	External	Internal	External	External	External
~3	~5	~5	~3	~3	~3

Circular 4.5 diameter
Circular 6 diameter x 3.25H
7.5W x 11.25D x 3.25H



SL 3000	SL 5000	SL 6000	SL 3100D	SL 5200D
Single	Single	Single	Dual	Dual
3000	5000	6000	1000/3000	2000/5000
0.01	0.01	0.01	0.01/0.1	0.01/0.1
0.01	0.01	0.01	0.01/0.05	0.01/0.05
0.015	0.015	0.015	0.015/0.05	0.015/0.05
External	External	External	External	External
~3	~3	~3	~3	~3

Circular 6.5 diameter



SA 120	SA 120IW	SA 210	SA 210IW	SA 310	SA 310IW
Single	Single	Single	Single	Single	Single
120	120	210	210	310	310
0.1	0.1	0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1	0.15	0.15
0.2	0.2	0.2	0.2	0.2	0.2
External	Internal	External	Internal	External	Internal
~3	~3	~3	~3	~5	~5



SP 500	SP 1000	SP 1500	SP 404D	SP 510D	SP 2050D
Single	Single	Single	Dual	Dual	Dual
500	1000	1500	40/400	100/500	500/2000
1	1	1	1/10	1/10	1/10
1	1	1	1/5	1/5	1/5
1.5	1.5	1.5	1.5/5	1.5/5	1.5/5
External	External	External	External	External	External
~3	~3	~3	~3	~3	~5



SG 3000	SG 5000	SG 8000	SG 12000
Single	Single	Single	Single
3000	5000	8000	12000
0.1	0.1	0.1	0.1
0.1	0.1	0.1	0.1
0.1	0.1	0.15	0.15
External	External	External	External
~3	~3	~3	~3
Rectangular 7.5W x 8D			
Not Available			
7.5W x 11.25D x 3.25H			

Optional ACCESSORIES

GLP/GMP/ISO Compatible

All Scientech balances are GLP/GMP/ISO compatible. Using a computer and one of our small, optional RS232 printers, you may print a hardcopy of either the GLP/GMP Compliance Report and/or a Balance Test for ISO calibration compliance anytime you desire.



Windscreens

Two windscreens are available for Scientech balances:

- ▶ 9.5" high analytical glass wind-screen with 3 sliding glass doors
- ▶ circular glass windscreen with stainless steel cover



Printers



These small thermal printers utilize the standard RS232 data interface which is in each Series 12000 model. Each printer includes interconnecting cable and is ideal for recording your reading for later review.

Custom Weight Register

This factory installed option allows you to weigh in any unit of measure you desire. It is ideal for results in basis weight, any weight per unit area measurement, or even dollars.

Anti-Vibration Table



Ideal for high vibration environments, this small, compact, vibration plate was designed to fit any Scientech balance or scale.

Other accessories include:

Optional remote weighing, NIST traceable calibration weights, spill covers, weighing bowls, rectangular pans, dust covers and software.

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